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New Normal Adaptation (NNA) Relationship with The Quality Of Life Hemodialysis Patients During The Covid-19 Pandemic At Lamongan Muhammadiyah Hospital

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ABSTRACT

Introduction: The quality of life of patients with Chronic Kidney Disease (CKD) who got hemodialysis had decreased along with the increasing level of the disease, so it caused problems of patient productivity. In the pandemic, hemodialysis patients were at very high risk of exposure to covid-19, it was very important to implement New Normal Adaptation to reduce morbidity and mortality. The purpose of this study was to explain the relationship between New Normal Adaptation and the life quality of hemodialysis patients during the pandemic of COVID-19 at Lamongan Muhammadiyah Hospital.

Methods: This study used a correlation design, by simple random sampling technique, the population was 85 respondents. The samples were 70 respondents in the Hemodialysis room at Lamongan Muhammadiyah Hospital which was in the inclusion criteria. The data that was collected included respondent characteristics, New Normal Adaptation and quality of life, the data collection used the google questionnaire form, then it was analyzed using the Spearman test.

Results: Some of the respondents were treated new normal in the moderate category, most of the respondents had life quality in the bad category and there was a relationship between New Normal Adaptation with the life quality of hemodialysis patients, the significant value was = 0.303 and p = 0.011 .

Conclusion: During the pandemic, health education activities for hemodialysis patients could use social media (Facebook, Instagram, Twitter, Whatsapp) that would increase New Normal Adaptation at home and in hospital. So that, the quality of the patient's life would be good.

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1. INTRODUCTION

The quality of life of patients with Chronic Kidney Disease (CKD) will decrease along with the increasing stage of the disease, which can cause problems for the patient's own productivity (Kefale et al., 2019). Conditions that occur in a decrease in quality of life physically show symptoms of pain, weakness, lack of energy, sleep disturbance, activity disturbance, in psychological problems the patient experiences depression, anger and rejection, this can have a negative effect which can lead to a decrease in patient compliance with treatment regimens, while social problems that occur can be caused by physical and psychological changes (Tallis, 2005). The most frequently affected domains were usual activities (79%), pain (76.20%) and anxiety or depression (71.91%) (Pauly et al., 2020).

CKD patients must carry out hemodialysis periodically, in the current situation, there is concern that there will be virus transmission when the patient is undergoing hemodialysis (Saeno, 2020). During the Adaptation to New Habits (IMR) various psychological problems emerged including depression, stress, anxiety disorders, panic and thoughts of ending one's life (Yuliyanto, 2020).

Applying IMR to patients during the Covid-19 pandemic is not easy. Patients undergoing hemodialysis must always use a mask that previously did not need to be used, this makes the patient uncomfortable and feels claustrophobic, always wash their hands after every contact and are not awaited by family members during hemodialysis due to physical distancing, this condition will affect quality of life. Hemodialysis patients are prone to contracting Covid-19 due to immune system disorders and must be put on collective dialysis three times a week for 4 hours so that cross-contamination can easily occur (Ibernon et al., 2020). The Indonesian government's policy in handling Covid-19 is the application of the IMR health protocol, but in practice IMR compliance is still very low so that the incidence of Covid-19 continues to increase (RI Minister of Health, 2020).

Global data, Chronic Kidney Disease occupies the 12th position of the 20 highest causes of death with a Crude Death Rate (per 100,000 population) of 15.8 which is in the moderate category. Deaths from Chronic Kidney Disease globally have increased from 2000, in which year Chronic Kidney Disease was in the 18th position as the cause of death in the world with a CDR value of 11.8 (WHO, 2018). RISKESDAS data for 2013 and 2018, the prevalence of Chronic Kidney Disease in Indonesia has increased by 0.20% in 2013, in 2018 it became 0.38% while the 2017 Indonesian Renal Registry (IRR) report 30,831 new hemodialysis patients, in 2018 new Hemodialysis patients were 66,433 people with an increase of 53.59%, while in 2017 the total active Hemodialysis patients were 77.

According to a study in Mumbai India, dialysis patients with Covid-19 infection showed 56.7% asymptomatic and 27% severe symptoms, 29.7% patients did not undergo dialysis, 54.5% were refused hemodialysis, 62.1% were in good condition and 37.8% died (Trivedi et al., 2020). Meanwhile, the results of Ibernon's research (2020) show that the incidence rate of Covid-19 in dialysis centers is 9.5% to 19.9% and the death rate is 25% to 30.5%. In the hemodialysis program the incidence rate is 5.7%. Three out of five required hospitalization (60%) and none died. Research data that specifically describes the quality of life of CKD patients undergoing hemodialysis during a pandemic has not been studied much. however, based on the research data above, it shows that the risk of exposure to hemodialysis patients from Covid-19 is very high, thereby increasing morbidity and mortality rates, these conditions will indirectly affect their quality of life. The emergence of fear of social stigma and exclusion from the environment due to Covid-19 status in hemodialysis patients is an additional reason that makes patients not seek medical care, this can lead to a decrease in their quality of life.

Data from the Hemodialysis Room at Muhammadiyah Lamongan Hospital from July to September 2020 showed that there were 97 CKD patients undergoing regular hemodialysis. During the COVID-19 pandemic season, patients underwent health protocols and underwent a Rapid Test screening before hemodialysis. Screening results obtained data that 17 (17.5%) patients were reactive, while swab results obtained 6 (35.2%) patients confirmed positive for COVID-19. , and 1 patient who was confirmed positive died (16.6%). The implementation of hemodialysis for CKD patients at Mummadiyah Hospital during the COVID-19 pandemic implemented a new procedure which included a schedule for hemodialysis based on the results of a rapid test and swab screening, reducing the time for hemodialysis from 4.5 hours to 4 hours, limiting communication between nurses and patients can cause information to be disrupted . In patients with CKD who are confirmed positive, they experience anxiety and fear of delaying the implementation of hemodialysis, this causes the patient's quality of life to get worse and the mortality rate to increase. Initial survey data on 5 patients in the HD room during the implementation of the IMR procedure found 4 (80%) patients said that their physical condition was more often weak, painful and weak at home and 1 (20%) patient said they rarely met close relatives.

According to the National Kidney Foundation, factors that affect the quality of life of hemodialysis patients are vascular access, dialysis adequacy, anemia, nutrition, hypertension and bone disease (phosphate and calcium control). Meanwhile, according to Desita (2010) in Aguswina, (2012) the factors that affect the quality of life of hemodialysis patients consist of gender, age, ethnicity or ethnicity, education, occupation, marital status, family support, medical staff support, length of time on hemodialysis, disease stage. , and medical management undertaken (Tarigan, 2013).

IMR is a community effort to adapt to the environment in the form of changes in behavior to become more disciplined, maintain cleanliness, and comply with health protocols, so that they remain productive and safe from Covid-19 (BKKBN, 2020). Guidelines for implementing IMR for patients include frequent hand washing with soap and running water, covering mouth and nose when coughing and sneezing using a folded elbow or tissue, using a mask, not touching face, eyes, nose and mouth, maintaining physical distance, not leaving the house and not gather in public places (Kepmenkes RI, 2020).

During the current COVID-19 pandemic, CKD patients require proper attention and care, because CKD is a comorbid disease that is at risk of exposure to COVID-19. According to Du Z et al, 2020, reported

12.6%show presymptomatic transmission, the virus is spread by droplets or contact with contaminated objects. Patients with comorbid diabetes mellitus, geriatric disease, autoimmune disease, kidney disease, STEMI, NSTEMI, hypertension, COPD, and tuberculosis, are at greater risk of experiencing more severe symptoms and death (Kepmenkes RI, 2020). Patient non-compliance with dialysis has an impact on complications of various diseases, frequent hospitalization, decreased productivity and can even cause death (Widyawati et al., 2018).

Roy's Adaptation nursing model is a model that views humans as an adaptation system starting from the individual level itself to adaptation to the environment. This theory explains the nursing process which aims to help a person to adapt to changes in physiological needs, self-concept, role function, and interdependence relationships during health and illness (Ariani, 2019). According to Headly & Wall in Mailani & Cholina (2015), the role of nurses in the hemodialysis unit in carrying out advanced nursing practice in hemodialysis patients can prevent complications that have an effect on improving the quality of life of hemodialysis patients. Nurses have an important role, in addition to providing care, also provides additional assistance services to patients in the form of interpersonal support aimed at helping patients effectively deal with stress, improve well-being, and accelerate health recovery. Partnerships and collaborations that exist between health professionals and patients can maximize patient satisfaction and improve patient health (Widyawati et al., 2018).

Health protocols that must be obeyed by CKD patients undergoing hemodialysis are expected to improve quality of life, the current situation of COVID-19 at the global and national levels is still at high risk. As long as vaccine development is still in progress, the world is faced with the reality of preparing to coexist with COVID-19. Treatment is aimed at symptomatic and supportive therapy. Based on the background described above, the researcher is interested in conducting a correlational study entitled The Relationship of Adaptation of New Habits (IMR) to the Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic at Muhammadiyah Lamongan Hospital, by using the Google form application to collect data, this aims to minimize contact with patients and prevent transmission of Covid-19.

2. METHODS

The design in this study uses a correlational study, which is a study conducted to determine the relationship between the variation of a variable and the variation of other variables. This study looks for the relationship between two variables, namely the independent variable which includes Adaptation to New Habits (IMR) and the dependent variable, namely the Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic by using a cross sectional approach.

Table 1 Distribution of respondents according to demographic characteristics in CKD undergoing hemodialysis in the Hemodialysis Room of Muhammadiyah Lamongan Hospital in January 2021

Characteristics		f	%
Gender	Man	29	41,4
	Woman	41	58,6
	Total	**70**	**100**
Age	20-25 Years	3	4,3
	26-30 Years	6	8,6
	31-35 Years	4	5,7
	36-40 Years	6	8,6
	41-45 Years	14	20.0
	46-50 Years	19	27,1
	51-56 Years	11	15,7
	56-60 Years	7	10.0
	Total	**70**	**100**
Work	Doesn't work	33	47,1
	Farmer / farmworker	8	11,4
	Private / Entrepreneur	23	32,9
	PNS/TNI/POLRI	6	8,6
	Total	**70**	**100**
Education	basic education	24	34,3
	Middle education	34	48,6
	higher education	12	17,1
	Total	**70**	**100**
Hemodialysis duration	New (< 2 Years)	34	48,6
	Old (> 2 Years)	36	51,4
	Total	**70**	**100**

The research location was carried out in the Hemodialysis Room at Muhammadiyah Lamongan Hospital. In this study, the population was all CKD on HD patients in the Hemodialysis Room at Muhammadiyah Lamongan Hospital in January 2021 as many as 85 patients. The sample size in this study was 70 patients. The sampling technique used is simple random sampling.

The instrument used is a questionnaire (google form). The collected data is presented in the form of cross-tabulations between the independent and dependent variables. Then tested with spearman to determine the relationship between independent and dependent variables. With a significance level of p = 0.05. The purpose of the data analysis above is to determine the relationship between Adaptation of New Habits (IMR) and Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic in the Hemodialysis Room of Muhammadiyah Lamongan Hospital.

3. RESULTS

The results of data collection from 70 patients obtained in January 2021 are in accordance with the stated research objectives, namely analyzing the relationship between Adaptation of New Habits (IMR) and the Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic in the Hemodialysis Room of Muhammadiyah Lamongan Hospital.

Table 2 Distribution of Respondents Based on Adaptation of New Habits (IMR) in the Hemodialysis Room of Muhammadiyah Lamongan Hospital in January 2021

No.	New Habit Adaptation (AKB)	Amount	Percentage (%)
1.	Not enough	10	14,3
2.	Enough	31	44,3
3.	Good	29	41,4
	Total	70	100.0

Table 3 Distribution of Respondents Based onPatient Quality of LifeHemodialysis During the COVID-19 Pandemic in the Hemodialysis Room of Muhammadiyah Lamongan Hospital in January 2021

No.	Quality of Life	Amount	Percentage (%)
1.	Not good	41	58,6
2.	Good	29	41,4
	Total	70	100.0

Demographic Data

The characteristics of respondents in the Hemodialysis Room at Muhammadiyah Lamongan Hospital are as follows:

Table 1 describes the distribution of respondents based on the characteristics of the respondents which shows that the majority of respondents were female, namely 41 (58.6%) and a small proportion of respondents were male, namely 29 (41.4%). Data on the age distribution of the respondents showed that almost half of the respondents were aged 46-50 years, namely 19 (27.1%) and a small number of respondents aged 20-25 years, namely 3 (4.3%). Data on the distribution of the respondents' work shows that almost half of the respondents did not work, namely 33 (47.1%) and a small number of respondents worked as civil servants / military / police, namely 6 (8.6%). The distribution of respondents' education showed that almost half of the respondents had secondary education, namely 34 (48.6%) and a small proportion of respondents who had higher education, namely 12 (17.1%).

Variable Data Measured

New Habit Adaptation (AKB)

Based on Table 2, it is known that almost half of the respondents adequately adapted to new habits, namely 31 (44.3%) and a small number of respondents did not adapt to new habits sufficiently, namely 10 (14.3%). Of the 10 respondents who did not apply adaptations to new habits, they were dominated by 6 women (60%), 6 respondents who did not work (60%), 46-50 year old respondents 3 (30%) and 6 middle-educated students (60%).

Quality of Life

Based on Table 5.3, it is known that most of the respondents have a poor quality of life, namely 41 (58.6%) and a small proportion of respondents have a good quality of life, namely 29 (41.4%). Of the 41 respondents who had a poor quality of life, 24 (58.5%) were female, 20 (48.7%) did not work, 46-50 years 9 (21.9%) and middle-educated 23 (56.1%).

Relationship between Adaptation of New Habits (IMR) and Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic.

Based on table 4 above, it shows that of the 10 respondents who had less IMR, 8 (80%) of respondents had a poor quality of life based on the questionnaire tabulation. hands with running water and soap and the inability to provide hand sanitizer while at home and when traveling. Distribution data from 31 respondents who had sufficient IMR, showed that 21 (67.7%) respondents had a poor quality of life. Meanwhile, from 29 respondents who have a good IMR, shows that 17 (58.6%) respondents have a good quality of life. Spearman test results obtained rs = 0.303 and p = 0.011 where the value of $p < \alpha$, which has been determined is the value of $\alpha < 0.05$, then H1 is accepted, meaning that there is a relationship between adaptation to new habits (IMR) and quality of life for hemodialysis patients during the COVID-19 pandemic in the hemodialysis room at Muhammadiyah Lamongan Hospital. Based on the value, namely rs = 0.303, so that the positive correlation with the level of relationship is moderately correlated, the relationship between the two variables is in the same direction or comparable, so it can be interpreted that the better the implementation of new habit adaptations by respondents, the better the quality of life, conversely, the less application of new habit adaptations by respondents respondents, the worse the quality of life.

4. DISCUSSION

New Habit Adaptation (AKB)

The level of implementation of the implementation of the Adaptation of New Habits (IMR) by respondents while in the hospital and while at home was in the sufficient category, respondents were dominated by female sex, respondents who did not work, respondents aged 46-50 years and had secondary education. This can be influenced by several factors both internal and external to the respondents. Internal factors include the level of knowledge, education, and age of the respondents, while external factors include the delivery of health information from health workers directly or through various electronic and printed media, family support is also the main factor for CKD patients to be able to carry out the IMR protocol, both moral support as well as materials. The low implementation of the respondent's IMR lies in the implementation of the new SOP which is still not understood by respondents regarding the length of time HD has undergone adjustments and the lack of direct contact between health workers and respondents in delivering health

information related to HD and COVID-19, so that respondents feel they do not get adequate information. In addition, the low implementation of IMR at home is also a problem, namely patients do not have hand sanitizer, so they never carry hand sanitizer when traveling or leaving the house.

IMR is a community effort to adapt to the environment, in the form of changing self-behavior to be more disciplined, maintain cleanliness, and comply with health protocol regulations, so that they remain productive while staying safe from Covid-19 (National Population and Family Agency, 2020). The Indonesian government's policy in handling Covid-19 is the application of the IMR health protocol, but in practice IMR compliance is still very low so that the incidence of Covid-19 continues to increase (RI Minister of Health, 2020).

During the Covid-19 pandemic season, it affects all aspects of life, especially the health problems of CKD patients who must require hemodialysis routinely and regularly. In the current situation, there is concern that virus transmission will occur when patients are on hemodialysis (Saeno, 2020). Applying IMR to CKD patients undergoing hemodialysis during the Covid-19 pandemic is not easy. Patients undergoing hemodialysis must always implement the 3M protocol which aims to prevent transmission of Covis-19 disease. Using a mask for a long time makes the patient uncomfortable and feels short of breath, tired due to always doing activities to wash hands after every contact and creates a feeling of fear,

Quality of Life

The quality of life of respondents who underwent HD at the hospital was not in the good category, this could be caused by several factors, including the length of time they had HD and the presence of other co-morbidities that the respondent had. Complaints of decreased quality of life from respondents were found in aspects of meeting the needs of daily activities which were disrupted, namely respondents requiring a lot of energy to carry out daily activities in fulfilling Activity Daily Life (ADL) while at home, easily tired when lifting objects, climbing stairs and walking 1 .5km. besides that the respondents also complained that they could not complete their activities quickly due to a decrease in their health, this condition could cause psychological disturbances from the respondents, emerging feelings of anxiety, sadness and emotions which had an impact on decreasing the quality of life of the respondents. Quality of life is a broad, multi-dimensional concept that usually includes subjective evaluations of both positive and negative aspects. The health aspect is an important domain in the overall quality of life. Other supporting domains include work, education, environment, culture, values and spirituality (CDC, 2011).

Several studies have reported that the quality of life of hemodialysis patients is worse than that of the general population, which is related to the physical, psychological, and social changes that occur in patients and is influenced by several factors including those with hemodialysis, health status (anemia), depression, family support (Septiwi, 2011). The results of the study stated that the family is expected to continue to help fulfill physiological needs, provide psychological support, assist in social activities and help solve environmental problems for family members undergoing hemodialysis in improving the patient's quality of life (Nabila, 2018).

Quality of life becomes an important aspect after patients undergo hemodialysis therapy. Some patients have a better quality of life and some have a lower quality of life than before undergoing hemodialysis, because in addition to facing problems related to the disease, it is also related to the therapy they are living for the rest of their life. The impact of hemodialysis will affect the patient's response. This is influenced by several factors, including individual characteristics, previous experiences, and coping mechanisms. Each dimension has its own influence on quality of life.

Relationship between Adaptation of New Habits (IMR) and Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic

Adaptation of new habits (IMR) is related to the quality of life of hemodialysis patients during the COVID-19 pandemic in the Hemodialysis Room of Muhammadiyah Lamongan Hospital. The correlation is positive with a moderate correlation level, the relationship between the two variables is in the same direction or comparable, so it can be interpreted that the better the adaptation of new habits by respondents, the better the quality of life, conversely, the less adaptation of new habits by respondents, the worse the quality his life.

The results of the research obtained by the researcher show that respondents who did not apply IMR while in the hospital while undergoing HD and while at home also did not apply the 3 M's, namely not wearing a mask, not washing their hands diligently, not keeping their distance, not carrying a hand sanitizer when leaving the house , then don't cover your face when coughing in a public place with a tissue or fold your elbow, have physical and psychological health problems. The low application of the IMR protocol by patients has resulted in a high number of patients being exposed to Covid-19. Data updates in the HD room at Muhammadiyah Lamongan Hospital show that many patients at the initial screening before undergoing HD were found to have fever, cough, runny nose, joint pain and anosmia (loss of sense of smell). After the SWAB test, many were confirmed positive. Physiologically, the patient experiences disturbances or decreased organ function due to exposure to Covid-19, while psychologically, the patient will feel severe fear and anxiety, this will have an impact on decreasing the

quality of life. This condition causes the morbidity and mortality rates of CKD patients with confirmed positive results to remain high during the Covid-19 pandemic.

Roy's adaptation nursing model is a model that views humans as an adaptation system starting from the individual level itself to adaptation to the environment. This theory explains the nursing process which aims to help a person to adapt to changes in physiological needs, self-concept, role function, and interdependence relationships during health and illness (Ariani, 2019). Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/413/2020 Concerning Guidelines for the Prevention and Control of Coronavirus Disease 2019 (Covid-19). Communities have an important role in breaking the chain of transmission of COVID-19 so as not to create new sources of transmission. With the principle of a higher level of patient compliance with the application of IMR while undergoing treatment at the hospital or while at home.

The quality of life of CKD patients before the Covid-19 pandemic could be affected by their physical and psychological health status, namely the severity of CKD and the presence of pre-existing comorbidities, an inadequate diet with decreased appetite, severe anemia, the onset of depression experienced by patients such as guilt, hopelessness, irritability, and low family support such as lack of information and lack of assistance to meet daily needs. Meanwhile, during the Covid-19 pandemic, patients were again faced with various health problems, because CKD is one of the co-morbidities with a high risk of transmission. CKD patients who are confirmed positive will experience a drastic decrease in body function and require HD cyto,

During the COVID-19 pandemic season, where people's movements are limited to seeking quality health information and services, the use of social media (Face book, What app, Instagram, etc.) is very important to support the quality of hospital services, one of which is to provide online-based services. line for CKD patients undergoing HD, health information services, health problem consultations can be provided to patients and minimize direct contact so as to break the chain of spread of COVID-19 and HD patients can improve their quality of life.

CONCLUSION

Adaptation of new habits (IMR) is related to the quality of life of hemodialysis patients during the COVID-19 pandemic in the Hemodialysis Room of Muhammadiyah Lamongan Hospital, a positive correlation with a moderate level of relationship, the relationship between the two variables is unidirectional or comparable, the better the adaptation of new habits, the better quality of life, conversely the less adaptation of new habits, the poorer the quality of life.

Table 4Relationship between Adaptation of New Habits (IMR) and Quality of Life of Hemodialysis Patients During the COVID-19 Pandemic in the Hemodialysis Room of Muhammadiyah Lamongan Hospital in January 2021

Category	Quality of Life				Total	
	Not good		Good			
AKB	Σ	%	Σ	%	Σ	%
Not enough	8	80	2	20	10	100
Enough	21	67,7	10	32,3	31	100
Good	12	41,4	17	58,6	29	100
Total	41	58,6	29	41,4	70	100

Spearman test results obtained rs = 0.303 and p = 0.011

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